

What is Claimed:

- 1           1.       An apparatus for generating delta/sigma modulation quantized data
- 2       representing the ratio of two frequencies  $F_x$  and  $F_s$ , comprising:
- 3               a counter circuit for counting the number of clock edges of  $F_s$
- 4               occurring in the time period between clock edges of  $F_x$ ; and
- 5               a register circuit for storing the value of the counter circuit at each
- 6       clock edge of  $F_s$ ;
- 7               the sequence of values from the register circuit constituting the
- 8       delta/sigma modulation quantized data.